



**Massachusetts Bay
Transportation Authority**

Safety Update

MBTA Board of Directors

April 14, 2022

John Connell, Director of Safety Engineering

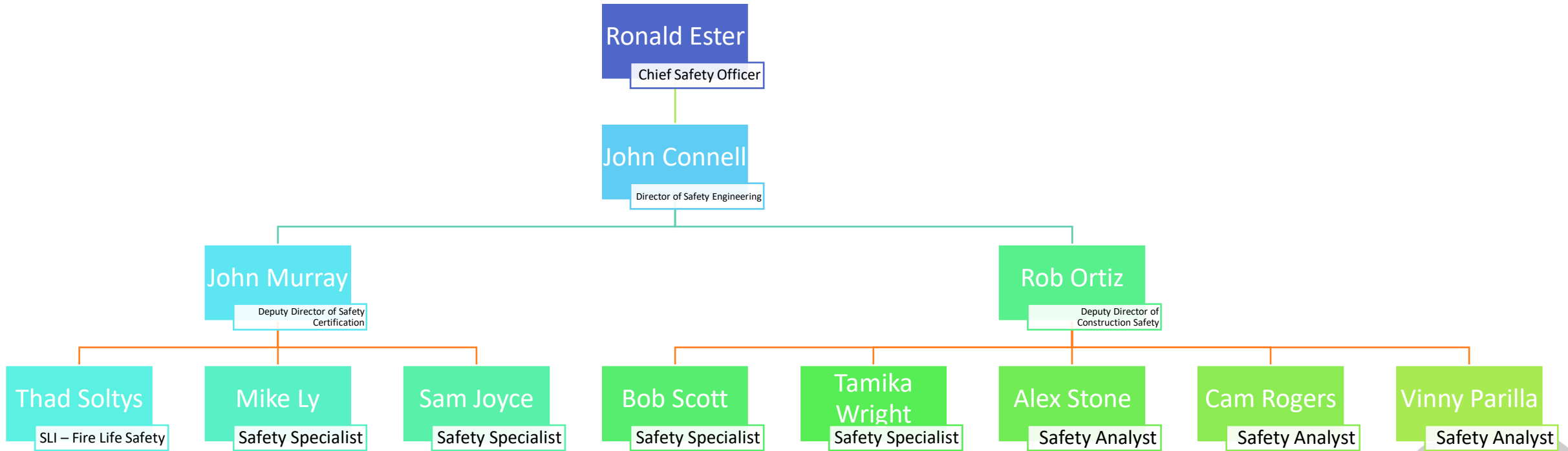
Agenda

Safety Department Engineering Team Overview

- Engineering Team Structure
 - Org Chart
 - Project Assignments
- Construction Safety Oversight
 - Processes & Tools
 - Office and Field Duties
- Safety Certification
 - Overview & Tier Levels
 - GLX



Engineering Team – Org Chart



Engineering Team – Project Assignments

Type	Phase		Total
	Construction	Design	
Infrastructure	44	37	81
TOD	21	11	32
Vehicles/Systems	13	5	18
Total	78	53	131

Construction Oversight	
Staff	Projects
Bob	12
Tamika	12
Alex	15
Cam	13
Vinny	13
Total	65



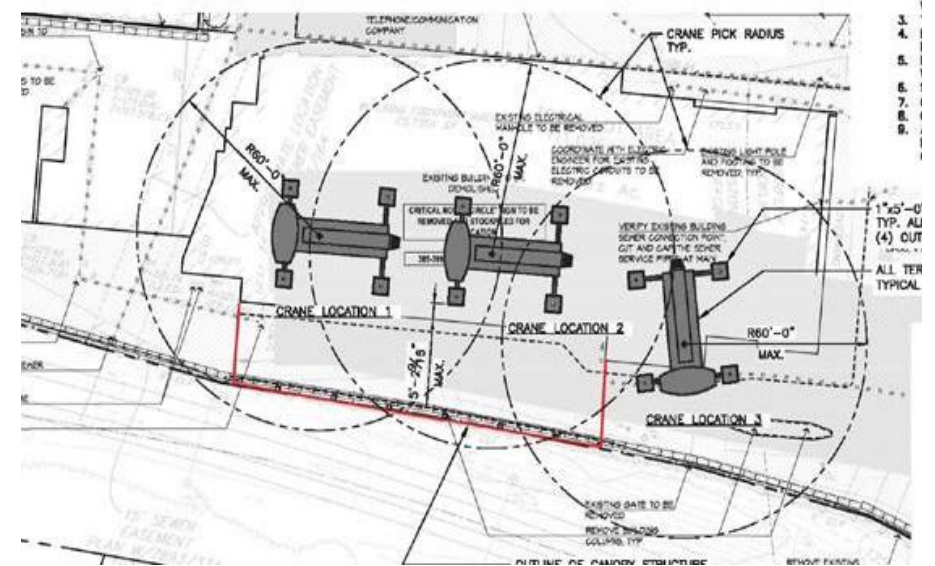
Construction Oversight – Processes & Tools



SECTION 01010 SUMMARY OF THE WORK PART 1 - GENERAL		
SECTION 01731 CUTTING AND PATCHING PART 1 - GENERAL		
SECTION 01568 CONSTRUCTION SAFETY PART 1 - GENERAL 1.1 DESCRIPTION A. This Section specifies requirements to establish a practical, sound, and effective program for the prevention of construction accidents, and to assign specific responsibilities to Contractors for program compliance. B. Contractors and their supervisors must control hazardous activities and conditions within their respective areas of contract responsibility. 1.2 SUBMITTALS A. Safety and Health Plan: The contractor shall, within thirty (30) days after receipt of the award of a contract, submit for approval to the MBTA, a detailed operational project-specific Safety and Health Plan. B. Safety Supervisor: The Contractor shall within thirty (30) days after receipt of the award of a contract submit the resume of the qualifications and work experience of the designated Safety Supervisor proposed for assignment to the Project. No construction work shall begin until the project Safety Supervisor has been approved by the MBTA. The Safety Supervisor shall have a minimum of 5 years of experience in construction safety or a related field. See Section 00700 for qualifications. C. Monthly Accident Experience Summary: The Contractor shall submit an Accident Experience Report monthly during the course of construction to the MBTA. D. Industrial Industry Records: Prior to start of work, the Contractor shall submit their Injury/Illness Records for the previous 3 years. In addition, the Contractor shall submit annually to the MBTA all subsequent Illness/Injury Reports for the duration of the project. PART 2 - PRODUCTS None		
A90CN03 2015	CONSTRUCTION SAFETY 01568-1	HARVARD CENTRAL MBTA 05/13 CONFORMED

Construction Oversight – Documentation Review

- Site Specific Health & Safety Plans
- Safety Supervisor Resumes
- Incident Reports
- Work Plans
- Emergency Evacuation Plans
- Crane Pick Plans
- Massachusetts Realty Group (MRG) License Reviews



Construction Oversight – Site Visits & Inspections

- On Track Protection/Flagging
- ROW/RWP Training
- Proper PPE
- Safety Briefings
- Job Specific Protections
 - Fall Protection
 - Scaffolding
 - Ladders
 - Housekeeping
 - Hot Work
 - Trenches
- MBTA Specific Hazards
 - Active Trains/Buses
 - Third Rail/OCS
 - Diversion Limits



Safety Certification – Overview

- Required by FTA and MA Dept of Public Utilities (DPU)
- Purpose: ensure that safety concerns and hazards are adequately addressed prior to final completion.
- Process includes:
 - Identification of specific safety requirements from project specifications
 - Development of Certifiable Items Lists (CIL)
 - Verification of compliance with the MBTA Safety Plan, appropriate codes, guidelines, standards, and design criteria
 - Identification and resolution of non-compliance (open items)
 - Final sign off and certification letter



Safety Certification – Tier Levels

Tier I

- Major capital projects over \$100m
- Comprehensive certification process
- Ex) GLX, SCR, RLOL Signals Upgrades, Quincy Bus Garage

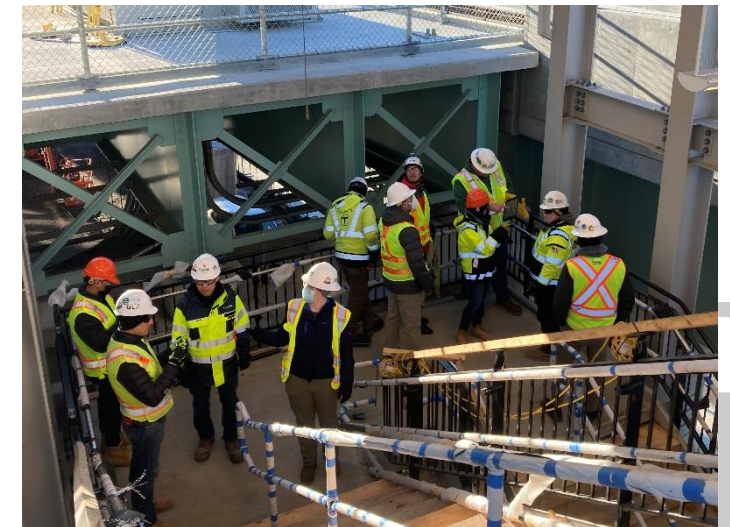
Tier II

- All other capital projects < \$100m
- Modified certification process
- Ex) Columbus Ave Bus Lane, RL Test Track, East Cambridge Viaduct



Safety Certification – GLX

Certification Document	Items
Certifiable Elements List (CEL)	72
Certifiable Items List (CIL)	3200
Preliminary Hazard Analysis (PHA)	671
Threat & Vulnerability Analysis	598
Safety & Security Verification Checklists (SSVCs)	64
Safety & Security Certification Verification Report	1



Conclusion

Questions?

